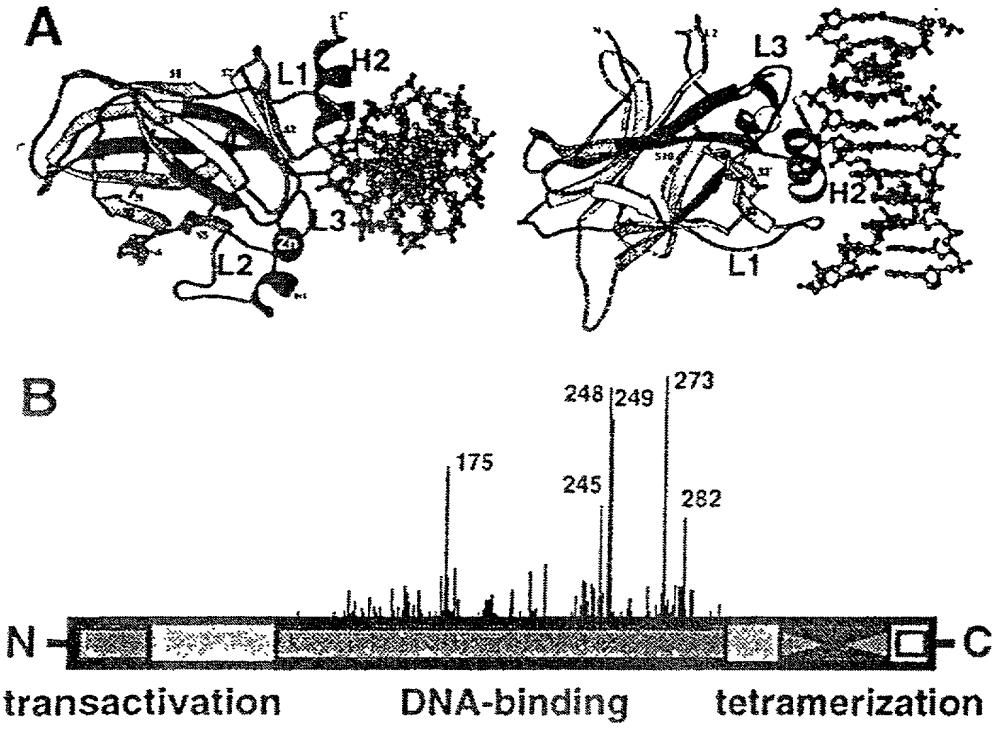
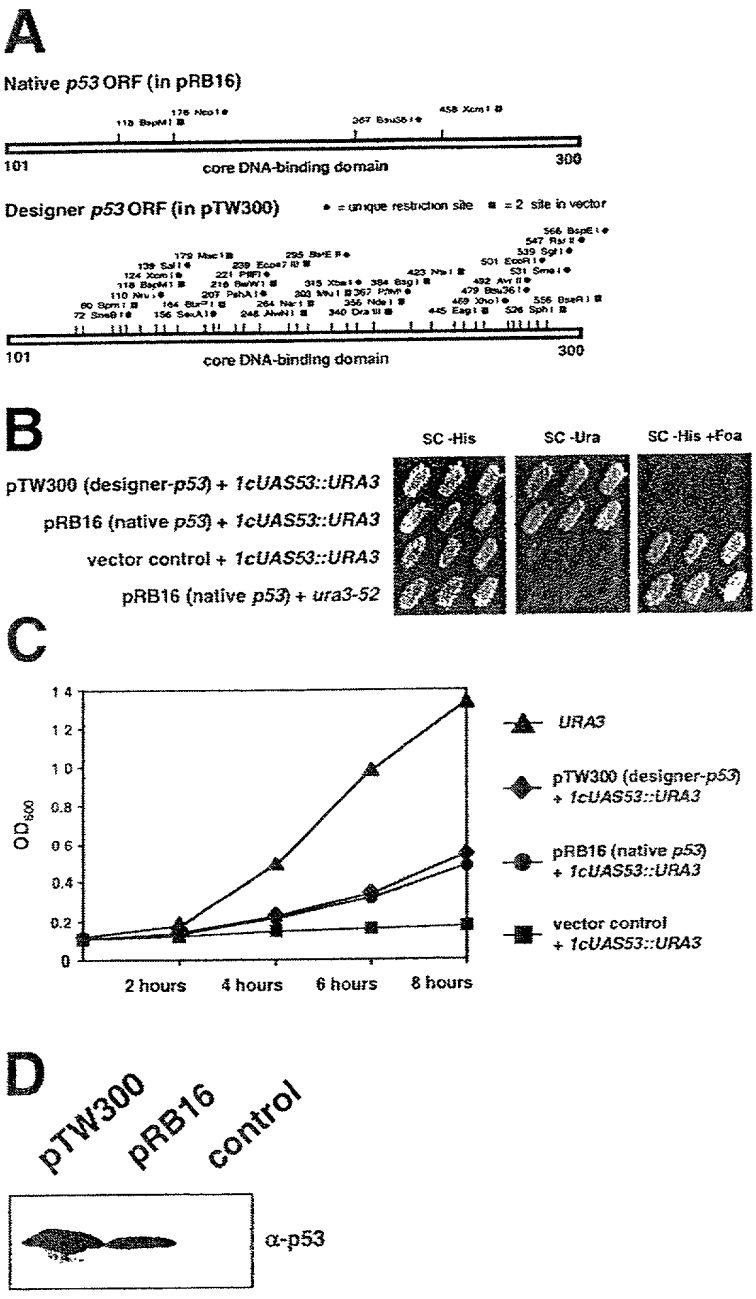
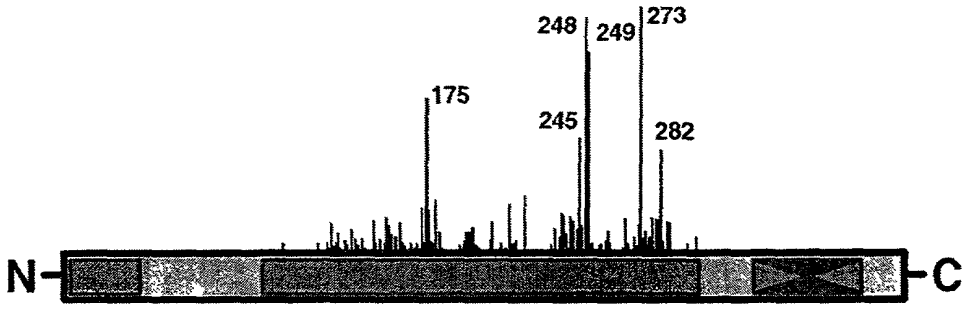
# Figure 1


A
L1
H2
L3
L2
Zn
L3
H2
L1
B
175
248
249
273
245
282
N
C
transactivation
DNA-binding
tetramerization

# Figure 2


A
Native p53 ORF (in pRB16)
101
core DNA-binding domain
300
Designer p53 ORF (in pTW300)
• = unique restriction site ■ = 2 site in vector
101
core DNA-binding domain
300
B
SC -His
SC -Ura
SC -His +Foa
pTW300 (designer-p53) + 1cUAS53::URA3
pRB16 (native p53) + 1cUAS53::URA3
vector control + 1cUAS53::URA3
pRB16 (native p53) + ura3-52
C
OD600
2 hours
4 hours
6 hours
8 hours
URA3
pTW300 (designer-p53) + 1cUAS53::URA3
pRB16 (native p53) + 1cUAS53::URA3
vector control + 1cUAS53::URA3
D
pTW300
pRB16
control
α-p53

# Figure 3




| Primary Analysis for Suppressor Mutations | |
|---|---|
| Arg175His<br>Gly245Ser<br>Arg248Gln<br>Arg248Trp<br>Arg249Ser<br>Arg273Cys<br>Arg273His<br>Arg282Trp | **8**<br>p53 mutants<br>1492/6645<br>**22%** |

| Subcloning Analysis | | | |
|---|---|---|---|
| Cys135Tyr | His179Arg | Gly245Cys | **27**<br>p53 mutants<br>961/6645<br>**15%** |
| Cys141Tyr | His179Tyr | Arg248Leu | |
| Pro151Ser | Tyr205Cys | Arg249Met | |
| Val157Phe | Tyr220Cys | Val272Met | |
| Arg158Leu | Tyr234Cys | Arg273Leu | |
| Tyr163Cys | Met237Ile | Pro278Leu | |
| Val173Leu | Cys238Tyr | Arg280Thr | |
| Val173Met | Ser241Phe | Glu285Lys | |
| Cys176Phe | Gly245Asp | Glu286Lys | |